

## REMARKS

The Applicants respectfully request reconsideration of this application in view of the above amendments and the following remarks.

### 35 U.S.C. §103(a) Rejection – Takemura and Sun

The Examiner has rejected claims 1-5, 7 and 10-14 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,759,739 issued to Takemura et al. (hereinafter referred to as “Takemura”) in view of U.S. Patent Application Publication No. 2005/0074699 issued to Sun et al. (hereinafter “Sun”). The Applicants respectfully submit that the present claims are allowable over any combination of Takemura and Sun.

Claim 1 recites a method comprising:

*“depositing a film layer on a substrate;*

*depositing a non-chemically amplified photoresist layer upon the film layer, the non-chemically amplified photoresist having a developer-soluble resin component and a photoactive compound component, the photoactive compound inhibiting the solubility of the developer-soluble resin;*

*exposing selected portions of the non-chemically amplified photoresist layer to a light source such that a solubility of the selected portions of the non-chemically amplified photoresist layer is promoted; and*

*developing the exposed portions of the non-chemically amplified photoresist layer”.*

Accordingly, claim 1 pertains to a method of using a **particular** non-chemically amplified photoresist. The **particular non-chemically amplified photoresist** has a

developer-soluble resin component and a photoactive compound component, the photoactive compound inhibits the solubility of the developer-soluble resin, and the exposure promotes solubility of the non-chemically amplified photoresist.

The Examiner has admitted that Takemura does not disclose that the photoresist layer is non-chemically amplified. See e.g., page 3 of the Office Action mailed on 5/11/06.

The Examiner has stated “Sun, in [0039] discloses that the chemically amplified photresist layer can be replaced with a non-chemically amplified photoresist layer”. See e.g., page 3 of the Office Action mailed on 5/11/06. Paragraph [0039] in Sun discusses in part “due to the extraordinarily thin photoresist, this invention opens an opportunity to replace the ever troubling chemically amplified photoresist with non-chemically amplified photoresists for the photolithography process of KrF or shorter wavelengths.” This paragraph [0039], as well as other portions of Sun, absolutely do not teach or suggest the **particular** non-chemically amplified photoresist recited in claim 1.

The Examiner is reminded that to establish a prima facie case of obviousness, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

Accordingly, claim 1 and its dependent claims are believed to be allowable over Takemura and Sun, which combination is not admitted to be appropriate.

Independent claim 10 and its dependent claims are believed to be allowable for one or more similar reasons.

### 35 U.S.C. §103(a) Rejection – Cathey and Sun

The Examiner has rejected claims 1, 6-7, 10 and 15 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,358,599 issued to Cathey et al. (hereinafter referred to as “Cathey”) in view of Sun. The Applicants respectfully submit that the present claims are allowable over any combination of Cathey and Sun.

The Examiner has admitted that Cathey does not disclose that the photoresist layer is non-chemically amplified. See e.g., page 4 of the Office Action mailed on 5/11/06.

As before, the Examiner has stated “Sun, in [0039] discloses that the chemically amplified photoresist layer can be replaced with a non-chemically amplified photoresist layer”. See e.g., page 3 of the Office Action mailed on 5/11/06. However, Sun absolutely do not teach or suggest the **particular** non-chemically amplified photoresist recited in independent claims 1 and 10. The discussion above is pertinent to this point.

Accordingly, independent claims 1 and 10, and their respective dependent claims, are believed to be allowable over Cathey and Sun, which combination is not admitted to be appropriate.

### 35 U.S.C. §103(a) Rejection – Cathey, Sun and Zhang

The Examiner has rejected claims 8 and 9 under 35 U.S.C. §103(a) as being unpatentable over Cathey in view of Sun as applied to claims 1, 6-7, 10 and 15, above, and further in view of U. S. Patent Application Publication No. 2004/0204328 issued to Zhang et al. (hereinafter “Zhang”). The Applicants respectfully submit that the present claims are allowable over any combination of Cathey, Sun and Zhang.

As discussed above, Cathey and Sun do not teach or suggest the limitations of the independent claims. Zhang does not remedy what is missing from Cathey and Sun. Accordingly, the independent claims, and their respective dependent claims, are believed to be allowable over Cathey, Sun, and Zhang, which combination is not admitted to be appropriate.

### **Conclusion**

In view of the foregoing, it is believed that all claims now pending patentably define the subject invention over the prior art of record and are in condition for allowance. Applicants respectfully request that the rejections be withdrawn and the claims be allowed at the earliest possible date.

### **Request For Telephone Interview**

The Examiner is invited to call Brent E. Vecchia at (303) 740-1980 if there remains any issue with allowance of the case.

### **Request For An Extension Of Time**

The Applicants respectfully petition for an extension of time to respond to the outstanding Office Action pursuant to 37 C.F.R. § 1.136(a) should one be necessary. Please charge our Deposit Account No. 02-2666 to cover the necessary fee under 37 C.F.R. § 1.17 for such an extension.

### **Charge Our Deposit Account**

Please charge any shortage to our Deposit Account No. 02-2666.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Date: 8/10/06

Brent E. Vecchia

Brent E. Vecchia  
Reg. No. 48,011

12400 Wilshire Boulevard  
Seventh Floor  
Los Angeles, California 90025-1030

Atty Docket No. 42P17301  
Application No. 10/687,288